

***National Type Evaluation Program***  
***Certificate of Conformance***  
***for Weighing and Measuring Devices***

**For:**

Bench Scale, Top Loading Balance  
Digital Electronic  
Models: EK and EW Series\*  
 $n_{\max}$  (Class II): 12 000  
 $n_{\max}$  (Class III): 4000  
Platform: See Page 2

Accuracy Class: II/III

**Submitted by:**

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**Standard Features and Options**

\* See Page 2 for the specific model numbers, capacities, platform sizes and accuracy class designations.

Net display indication  
Externally selectable: pound, gram, ounce, pennyweight, grain, troy ounce, carat, and momme units (MODE key)  
Semi-automatic zero and tare with motion detection  
Automatic zero setting mechanism  
Gravity correction capability  
AC power adapter  
Level indicator

The following features are included only on the EK-G, EK-H and EW-G Series scales:

Piece counting - "THE COUNTING FEATURE IS NOT LEGAL FOR TRADE" is labeled on the front of the scale

Weight comparator mode

**Option:** Rechargeable battery pack. A low battery indication, "lb", replaces the weight display.

Temperature Range: -10 °C to 40 °C (Class III, EW-G and EW-300GD Series)  
5 °C to 40 °C (Class II; EK-12KG, EK-G, EK-H and EK-GD Series)  
5 °C to 40 °C (Class III, EK-400H and EK-4000H)

This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: August 20, 1998

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Gilbert M. Ugiansky, Ph.D.  
Chief, Office of Weights and Measures  
Issue Date: September 8, 1998

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**A & D Weighing Division**  
**Bench Scale, Top Loading Balance, Digital Electronic**  
**Models: EK and EW Series**

Model	Capacity (g)	n <sub>max</sub>	Class	Platform
EW-60G	60 x 0.02	3000	III	110 mm Diameter
EW-300G	300 x 0.1	3000	III	133 x 170 mm
EW-300GD	300 x 0.1	3000	III	110 mm Diameter
EW-600G	600 x 0.2	3000	III	133 x 170 mm
EW-3000G	3000 x 1	3000	III	133 x 170 mm
EK-120G	120 x 0.01	12 000	II	110 mm Diameter
EK-400H	400 x 0.1	4000	III	133 x 170 mm
EK-600G	600 x 0.1 or 0.05	12 000	II	133 x 170 mm
EK-600GD	622 x 0.1	6220	II	110 mm Diameter
EK-600H	600 x 0.1	6000	II	133 x 170 mm
EK-1200G	1200 x 0.1	12 000	II	133 x 170 mm
EK-1200GD	1200 x 0.1	12 000	II	110 mm Diameter
EK-4000H	4000 x 1	4000	III	133 x 170 mm
EK-6000G	6000 x 1 or 0.5	12 000	II	133 x 170 mm
EK-6000H	6000 x 1	6000	II	133 x 170 mm
EK-12KG	12 000 x 1	12 000	II	133 x 170 mm

**Application:** General purpose bench scale. The EK-G and EK-GD Series scales are suitable for use as jewelers balance or grain test scales (except for FGIS grain test grading applications).

**Identification:** The manufacturer's identification, model number, and serial number are on a pressure sensitive, self-destructive label located on the right side of the scale.

**Sealing:** A pressure sensitive security seal can be applied over the plate that covers the access to the calibration switch.

**Test Conditions:** This Certificate supersedes Certificate of Conformance Number 95-097 and is issued to include the EK-H Series (four models). The EK-H is identical to the EK-G Series but with a lower resolution. These scales are included based on information provided by the manufacturer and test results from the EK-G and EW-G Series. Previous test conditions are repeated below for reference.

**Certificate of Conformance Number 95-097:** Models EK-12KG and EK-120G were submitted for evaluation. The emphasis of the evaluation was on the device design and performance. The scales were tested over a voltage range of 100 to 130 VAC and 10.0 to 12 VDC. Influence factor tests were conducted at 20 °C, -10 °C, 5 °C, 40 °C and 20 °C. Additionally, a load of one-half capacity was placed on the scales over 100 000 times. The EW-G Series scales are included with this evaluation since they are identical to the EK-G Series except for the markings and set-up configuration. The EK-GD and EW-GD Series scales are identical to the EK-G and EW-G except the comparator and counting features have been removed. The results of the evaluation and information provided by the manufacturer indicate the devices comply with applicable requirements.

**Type Evaluation Criteria Used:** NIST Handbook 44, 1998 Edition

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